

considered, that a definite opinion cannot be given until more material has been collected. We are under the impression that very small doses, such as five minim three times a day for a few days, have no other effect than to raise the lymphocytes slightly. In ten minim doses, three times a day over a similar period, we have seen repeatedly mild leucocytoses followed by a drop below the normal, with the same shifting in the differential count as observed in smaller doses. We have not seen any justification for using larger doses and, therefore, refrain from an opinion at this time. So far, we have not been able to find any changes in blood pressures when these small doses are used, but our observations have been confined to primarily normal pressures, and those raised by some toxic influence caused by pregnancies.

In regard to the breaking down of benzyl benzoate, we have not been able to demonstrate, to our satisfaction, that phenol is a factor, although we surmised it. It was this substance which was found as the end-product of benzol, and which we thought might also be a factor in the breaking down of benzyl benzoate. Also this question we have to leave unanswered, but we are at work, and shall have something to say within a few months.

It has been a rather hurried review of known and new experimental facts I have outlined, and I do not wish to leave the impression, that because animal experimentation has brought out facts that seem to point toward some dangers in benzyl benzoate therapy that this substance is a hazardous drug for man in the amount that is used at the present time. Nevertheless, we have been confronted with a controversy as to its actual value as an anti-spasmodic when it is used in small doses. If larger doses will be needed in order to produce an anti-spasmodic action, we must consider the experimental proof that this substance paralyzes the respiratory center, lowers the blood pressure, weakens the myocardium, influences the blood-forming mechanism, and depresses antibody formation to a degree which allows latent infections to become active. Until further proof is forthcoming that these animal results are wrong, or that we do not have to fear such results in man, we must select our patients for benzyl benzoate therapy, with all these possibilities in mind, and keep our dosage within very narrow limits in order to avoid unforeseen disasters.

THE 1922 MEETING OF THE STATE SOCIETY

The fifty-first session of the State Society will be held in Yosemite National Park, Monday, Tuesday, Wednesday and Thursday, May 15 to 18, inclusive. The A. M. A. will be held during the corresponding days of the following week at St. Louis.

It will be feasible to attend the State meeting, leave Yosemite on Friday, and be in St. Louis for the A. M. A. without any loss of time.

Watch for the October Journal for news about the next convention.

THE PSYCHOPATHOLOGY OF SOMATIC DISEASE.*

By CHARLES LEWIS ALLEN, M. D., Los Angeles, California.

The duty of the physician when he takes charge of a case of illness is not so much to name and classify the disease from which the patient is suffering, as to estimate the probable reaction of the latter to the underlying pathological process and to modify this, if possible, if it is excessive or inadequate, guiding the sufferer to recovery.

Not the least important of the reactions of the organism is that on the part of the nervous system, particularly in its most complicated functions, which are manifested in what we call mind.

No one doubts today that the seat of these functions is chiefly in the cells of the brain cortex, the neurons.

The intimate connection of the brain with all other organs and the sensitiveness of its neurons to elevation of temperature, interference with blood supply and the presence in their nutrient media of substances deleterious, or directly poisonous, as well as to reflex influences, such as pain, makes it impossible for it to remain uninfluenced in disease of other organs, even the most remote. Conversely the relation is reciprocal, the mental state exerting a profound influence upon the body functions, accelerating, retarding or inhibiting. The mental attitude with which disease is faced has an important bearing upon its course.

The mental reaction to various situations is largely determined by the original constitution and the subsequent training of the nervous system; the more uncontrolled the mind, the less its ability to withstand stresses of any sort, among them that of somatic disease. We see this illustrated every day in the large class of ill-adjusted people, for the most conspicuous of whom the characterization "psychopathic personalities" is entirely justified.

Mercier long ago declared that insanity was due to two factors, heredity and stress. The same idea has been recently developed by Adler in his study of the inferiority of organs as a factor in disease and the possibility of its psychic compensation.

The Freudian school traces the psychic manifestations of the neuroses and minor psychoses to hidden or repressed complexes, usually of a sexual nature, while for Sidis the natural and necessary "fear instinct," when uncontrolled or perverted, is at the bottom of a vast train of morbid manifestations which we bring under the psycho-neuroses. Now what fear is more powerful than the fear of death? Strong enough is the fear of suffering, of permanent illness, of financial loss, etc. Fortunate indeed is the physician, if he can preserve in the patient a calm and hopeful outlook throughout his disease.

Most striking is the difference in the disease picture in the mentally normal and in the chronic demented class of the insane. The latter, having no minds to react, suffer the most painful injuries and pass through the severest illnesses without

* Read before the Fiftieth Annual Meeting of the Medical Society of the State of California, San Diego, May, 1921.